

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: Not Assigned )  
Examiner: Not Assigned )  
Inventors: Hanna S. Hsu, et al. )  
Serial No.: )  
Filed: Herewith )  
For: POLYPHASE FILTER WITH STACK )  
SHIFT CAPABILITY )

INFORMATION DISCLOSURE STATEMENT  
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Sir/Madam:

In accordance with 37 C.F.R. Section 1.56, the Examiner is hereby respectfully advised that the patents and articles listed on the attached PTO-1449 form are known by or have come to the attention of Applicant, and are being submitted herewith for consideration by the Examiner. A copy of these documents is included herewith.

The above described documents are being cited only in the interest of candor and without any admission that they constitute statutory prior art or contain subject matter which anticipates the invention or which would render the same obvious, either singly or in combination with other references, to a person of ordinary skill in the art.

Respectfully submitted,

Dated: November 24, 1999

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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE  
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SERIAL NO.

INFORMATION DISCLOSURE  
STATEMENT

APPLICANT: Hsu, et al.

(USE SEVERAL SHEETS IF NECESSARY)

FILING DATE: November 24, 1999

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILED DATE APPROX.
CO	4	1	0	7	4	7	0	08-15-79	Maruta, et al.			
CO	4	3	9	3	4	5	6	07-12-83	Marshall, et al.			
CO	4	7	9	2	9	4	3	12-20-88	Gockler, et al.			
CO	4	8	3	9	8	8	9	06-13-89	Gockler, et al.			
CO	5	4	3	6	9	4	0	07-25-95	Nguyen, et al.			
CO	5	6	0	6	5	7	5	02-25-97	Williams, et al.			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

## OTHER INFORMATION (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

~~"Multi-Rate Digital Signal Processing," by Ronald E. Crochiere and Lawrence R. Rabiner, Prentice Hall, copyright 1983, pages 360-362.~~

~~"A Silicon Compilere for High-Speed CMOS Multirae FIR Digital Filters," Robert Hawley M.S. thesis, University of California, Los Angeles, 1991.~~

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.